

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION**

**WSOU INVESTMENTS, LLC D/B/A
BRAZOS LICENSING AND
DEVELOPMENT,**

Plaintiff,

v.

MICROSOFT CORPORATION,

Defendant.

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**CIVIL ACTION 6:20-cv-00454-ADA
CIVIL ACTION 6:20-cv-00461-ADA
CIVIL ACTION 6:20-cv-00465-ADA**

**PLAINTIFF'S REPLY IN SUPPORT OF
OPENING CLAIM CONSTRUCTION BRIEF**

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I. U.S. Patent No. 7,106,702 (Case No. 6:20-cv-00461-ADA)

A. Construction disputes

Microsoft agrees that terms no. 1 (as numbered in opening brief) require no construction; and it also does not dispute that term no. 2 (“the AAA functions”) makes reference to the antecedent recitation of “authentication, authorization and accounting (AAA) functionality.” Dkt. 47, 2–4. Microsoft’s only gripe is that those terms are not properly before the Court. Dkt. 50, 5. WSOU can hardly be faulted for misunderstanding which terms Microsoft seeks to construe, given Microsoft’s position was a shifting target even up until the week before the opening brief was due to be filed. As to the term “the AAA functions,” WSOU has consistently identified that term as one which requires construction, due in part to arguments Microsoft has made during the *Markman* process. It is unclear why Microsoft believes it alone is allowed to identify terms for construction.

3. “active node(s)”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
node(s) in an active state of AAA functionality ¹	node(s) that carry out the AAA functions for the network by employing their respective user databases

Microsoft falsely asserts “[t]he patent drafter did not provide an express definition for ‘active nodes’ here, so any appeals to lexicography are inapposite.” Dkt. 50, 6–7. It is telling that Microsoft failed to offer any explanation as to why the following statement in the specification is allegedly *not* lexicographic: “[*h*]erein, the terms ‘active’ and ‘non-active’ when used in the context of ‘active node’ and ‘non-active node’ refers to the state of the node’s AAA functionality.” ’702 patent, 3:22–27 (emphasis added). Here, the patentee clearly signaled lexicographic intent by (1) use of the word “herein,” (2) setting off *both* the “active” qualifier *and* the “active node” term with quotation marks, and (3) use of the signal “refers to” followed by a definition. *Fisher-Rosemount Sys., Inc. v. Invensys Sys., Inc.*, No. A-13-CA-587-SS, 2015 WL 1275910, at *11 (W.D. Tex. Mar. 19, 2015) (instructing that “[c]lear definitions are usually set off

¹ The term “active node” is recited both in the plural and in the singular in the claims. Microsoft misstates WSOU’s proposed construction for this term. *Compare* Dkt. 50, 6 *with* Dkt. 47, 4.

by quotation marks or are marked by the word ‘is.’”) (citation omitted). In arguing for a different construction, Microsoft simply ignores this explicit lexicography altogether.

Microsoft also fails to comprehend why its untethered construction would incorrectly encompass nodes that are not presently operating in an active state. To be clear, Microsoft does not propose construing this term as “nodes that *are presently carrying* out the AAA functions.” Rather, Microsoft’s construction expresses functional capability in general—i.e., “nodes that carry out the AAA functions” The ’702 patent makes clear that even though a set of nodes may all have the *capability* to carry out AAA functions when required, this does not necessarily mean all such nodes continuously operate in an active state. *See* Dkt. 49, 5 (discussing ’702 patent, 3:29–31). The patentee avoided any needless ambiguity injected by Microsoft’s proposed construction by explicitly defining “active nodes” to refer to the *state* of the node’s AAA functionality. ’702 patent, 3:22–27.

Microsoft boasts that its proposed construction “comes directly from the specification.” Dkt. 50, 6. But that also could be said of every other gross transgression of the “cardinal sin” of reading limitations from the specification into the claims. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1320 (Fed. Cir. 2005). The exemplary disclosure Microsoft impermissibly seeks to add as a claim limitation concerns *how* an “active node” *may* carry out AAA functionality *in certain embodiments*—i.e., “. . . by employing their respective user databases.” Dkt. 50, 6 (quoting ’702 patent, 2:8–11). While Microsoft incorrectly characterizes this exemplary disclosure as a “requirement” (*id.*, 7), Microsoft fails to explain why the Court should find any disclaimer here. Even if this were the *only* embodiment disclosed, and it is not, it still would be improper here to read in the cited disclosure as a claim limitation. *Cisco Sys., Inc. v. TQ Delta, LLC*, 928 F.3d 1359, 1364 (Fed. Cir. 2019) (“[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited”) (quoting *Liebel-Flarsheim Co v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004)).

It is clear Microsoft has improperly viewed claim construction as an opportunity to advance a longshot non-infringement position. For virtually every one of its proposed constructions, Microsoft returns to its untethered theory that every claim allegedly requires “an exclusive, one-one-one relationship between node and user database.” Dkt. 50, 13 n.2. For the “active node(s)” term, Microsoft attempts to insert this additional, unrecited requirement as, “... by employing their respective user databases.” Even if one were to set aside the lexicography discussed above, claim differentiation also independently defeats Microsoft’s strained interpretation, as explained in the opening brief. Dkt. 47, 6–7. Microsoft’s only response is that claim differentiation does not apply here, ostensibly because “claim 8 specifically requires ‘provisioning each of the plurality of nodes with a duplicate copy of a user database,’ which is not the same as provisioning a node with a user database.” Dkt. 50, 8. Microsoft appears to have taken the undefended and untenable positions that (1) claim 1 requires an *unrecited* user database per node and (2) claim 8 (depending therefrom) somehow requires an additional copy of that unrecited database (i.e., two databases per node). The word “duplicate” in the phrase “a duplicate copy of a user database” (claim 8, 5:30–33) simply refers to the fact that the *same* database is provided to each node, and thus each one is a “duplicate” of the others. This plain reading of claim 8 is supported by a disclosed example embodiment, where the *initial* provision is referred to in terms of “duplicate copies of the user database employed to carry out AAA functions” (3:29–31). That claim 8 *requires* a database for each node (where each is a duplicate of the others), and claim 1 *does not so require*, only confirms that Microsoft’s construction would violate the doctrine of claim differentiation. Dkt. 47, 6–7.

4. “monitoring ...” terms

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	two active nodes monitoring one another to detect if one becomes disconnected from the network

Microsoft misstates the law in suggesting Microsoft is justified in reading in limitations from exemplary disclosure in the specification because allegedly “only one monitoring protocol” is disclosed. Dkt. 50, 10 (citing *Wang Labs., Inc. v. America Online, Inc.*, 197 F.3d 1377, 1383

(Fed. Cir. 1999)). The Federal Circuit unequivocally explained that *Wang Labs* “does not stand for the proposition that if a patent specification describes only a particular embodiment, the claims must be limited to that subject matter. We have never read *Wang Labs* to stand for so broad a proposition.” *Liebel-Flarsheim*, 358 F.3d 898 at 907.

WSOU also explained in its opening brief why Microsoft’s proposed construction is presumptively incorrect due to the doctrine of claim differentiation. Dkt. 47, 7–8. The presumption arises here not only by comparing claims 1 and 3 but also by comparing claims 11 and 16. *Id.* Microsoft responds that the presumption is rebuttable and that it is rebutted here simply because Microsoft says so. Dkt. 50, 11. However, the presumption here “is especially strong” because “the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim.” *SunRace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003). Claim 16 differs from claim 11, for example, only by adding the limitation that the claimed “active nodes monitoring one another” is “no more than two of the plurality of nodes.” This is precisely what Microsoft seeks to import into claim 11 through its erroneous claim construction—i.e., “two active nodes monitoring one another” It is telling that Microsoft ignores the differentiation of claims 11 and 16 altogether.

5. “each of said nodes having a user database”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	each of said nodes maintaining its own user database

Claim 18 is the only claim to recite “each of said nodes having a user database.” Microsoft overgeneralizes the dispute over this specific phrase as, instead, concerning “whether the claimed ‘nodes’ of the ’702 patent [in general] each have their own user database.” Dkt. 50, 12. The dispute over this phrase pertains to claim 18 alone; and it does not somehow present a basis to apply a generalized limitation to *all claims* of the ’702 patent.

Microsoft has attempted to rewrite this term as “each of said nodes maintaining its own user database” (*in the singular*). Yet again, Microsoft seeks a narrowing interpretation (albeit applicable to this claim alone) that there must be “an exclusive, one-to-one relationship between node and user database such that each claimed node has its own database.” *Id.* As alleged support for its interpretation, Microsoft repeatedly cites to instances in the specification where example embodiments are described in terms of “nodes” (*in the plural*) employing “their respective user databases” (*also in the plural*). *Id.* However, nothing in the cited disclosures precludes nodes from *sharing* user databases, such as, for example, one pair of nodes sharing one user database and another pair of nodes sharing another user database. Such a scenario would still fit the description of multiple nodes employing their respective databases. Indeed, the ’702 does not explicitly state anywhere that there must always be a “one-to-one” relationship between node and user database.

There appears to be little left to dispute now that Microsoft has acknowledged that the patentee’s word choice of “having” should control here. *Id.*, 13 (“Microsoft agrees with WSOU that the patentee’s word choice here of ‘having’ should be given meaningful effect.”) (internal quotations and citation omitted). Given that Microsoft’s construction initially sought to rewrite “having a” as “maintaining its own,” and further given Microsoft has now conceded that “having” should be given meaningful effect here (*id.*, 13 n.2), the phrase “each of said nodes having a user database” (recited only in claim 18) should simply be afforded its plain and ordinary meaning.

B. Microsoft has not proven indefiniteness by clear and convincing evidence

Microsoft has not met its burden to prove indefiniteness *by clear and convincing evidence* merely by offering attorney argument, without the support of any expert testimony, that “a Skilled Artisan would not be able to reasonably understand what is meant by” the claim language it challenges as being indefinite. Dkt. 50, 14. Because Microsoft’s “garden-variety theory of indefiniteness ‘requires a determination whether those skilled in the art would understand what is claimed,’ *Spanston, Inc. v. Int’l Trade Comm’n*, 629 F.3d 1331, 1344 (Fed. Cir. 2010) (citation omitted), the Court [should] conclude[] that expert testimony is necessary” here to meet the exacting burden of proof. *Lecat’s Ventriloscope v. MT Tool & Mfg.*, 351 F. Supp. 3d 1100, 1114

(N.D. Ill. 2018); *see also Whirlpool Corp. v. Ozcan*, No. 2:15-CV-2103-JRG, 2016 WL 7474517, at *3 (E.D. Tex. Dec. 29, 2016) (rejecting indefiniteness contention and noting that the accused infringer only provided attorney arguments to support its position, and no expert testimony).

6. “activating the AAA functions of the active nodes”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft has not met its burden to prove indefiniteness *by clear and convincing evidence* merely by offering attorney argument, without the support of any expert testimony, that “a Skilled Artisan would not be able to reasonably understand what is meant by ‘activating the AAA functions of active nodes.’” Dkt. 50, 14. This word choice makes clear that the nodes selected in step (a) are those that *will become* ‘active nodes’ by executing the ‘activating’ step (b).” Dkt. 47, 9–10 (emphasis original). Microsoft responds (through attorney argument only) that the above straightforward interpretation cannot be correct ostensibly because step (a) recites “*to be*” and step (d) recites “*to become*.” According to Microsoft, in this context, “to be” and “to become” must be interpreted to mean different things. Dkt. 50, 15. But Microsoft’s counsel overlooks that the ’702 patent uses “to be” and “to become” interchangeably in this very context. *Compare* ’702 patent, 2:13–16 (“When one is determined to be disconnected from the network another of the plurality of nodes is selected *to be* an active node and the network informed thereof.”) *with id.*, 5:1–3 (“(d) if one of the active nodes gets disconnected from the network[,], selecting another of the plurality of nodes *to become* an active node”) (emphasis added in both instances).

7. “geographic distance ... maximized” terms

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft’s sole reliance on attorney argument, without the support of any expert testimony, also fails to prove indefiniteness *by clear and convincing evidence* for the “geographic

distance ... maximized” terms.² Microsoft’s first attorney argument is that “there are many methods to calculate ‘geographic distance’ between two points.” Dkt. 50, 16–17. Microsoft “misses the point.” *Id.* That various methods to calculate distance were allegedly known does not prove indefiniteness. A person of ordinary skill in the art could consistently apply *any one* of the alleged measurement techniques Microsoft’s counsel identifies (*e.g.*, GPS or straight-line distance) to determine which pair of nodes has the “maximized” distance therebetween, as compared to other node pairs under consideration. In other words, one may simply select a given measurement technique and then make comparisons between node pairs consistently using that same technique. This would yield the pair having a “maximized” geographic distance therebetween, *regardless of the specific measurement technique consistently used.*

Microsoft also has not proven indefiniteness by its attorney argument that “neither the specification nor any of the claims that include ‘geographic distance’ limitations specify how to determine when a geographic distance is ‘maximized.’” *Id.*, 17. The disputed claim language does not recite any temporal “when” requirement. As discussed above, the surrounding context plainly recites “maximized” as a limiting qualifier pertaining to which node pair is selected in the referenced step of claim 1. The authority Microsoft cites does not support its indefiniteness theory. *Id.* (citing *In re Corkill*, 771 F.2d 1496, 1501 (Fed. Cir. 1985)). *In re Corkill* addressed claims rejected by the United States Patent and Trademark Office as having a scope which the applicant admitted read on an inoperative species. Here, Microsoft provides no evidentiary basis to conclude that any inoperative species fall within the scope of the dependent claims at issue, which all carry a *presumption* of validity (unlike the rejected claims in *In re Corkill*). Microsoft also leaves unaddressed the authority distinguishing the statutory *definiteness* requirement from that of *inoperativeness* and *lack of enablement*. Dkt. 47, 11 (collecting cases).

Microsoft’s third attorney argument that “the geographic distance between any two nodes is fixed, and therefore cannot be ‘maximized’” ignores the context in which the claim language in

² In addressing this term, Microsoft repeatedly asks the Court to take its *counsel* at *their* word as to the perspective of a “Skilled Artisan.” This fails to meet the exacting evidentiary burden.

question is recited. Dkt. 50, 18. The dependent claims in question add limitations to a respective selecting step of claim 1. Claim 2, for example, requires that “the two active nodes selected in step (a) [of claim 1] are chosen so that a geographic distance therebetween is maximized.” This claim language expresses choice. It is basic geometry that two given points will have a distance therebetween. A comparison of distances between pairs of points will yield a maximum as to a given collection of points. Claim 2 requires the chosen pair to be the one that yields the “maximized” distance therebetween, as compared to the other pairs for the “plurality of nodes.”

8. “logging changes ...” terms

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft’s sole reliance on attorney argument, without the support of any expert testimony, also fails to prove indefiniteness *by clear and convincing evidence* for the “logging changes ...” terms. Microsoft first raises the conclusory attorney argument that “it is not possible for a Skilled Artisan to understand what ‘logging’ entails in combination with the other elements of this limitation.” Dkt. 50, 19. Microsoft unduly diminishes the significance of what is recited in the surrounding context—*e.g.*, “logging changes to the user databases for the active nodes thereby updating the same to reflect changes in information contained therein” (claims 9 and 18).³ The “logging” term is expressly directed to “users databases for the active nodes” (in the plural); and “updating the same to reflect changes in information contained therein” is likewise directed to the “user database for the active nodes” (in the plural). Thus, in referring to “user databases for the active nodes” as a whole, “logging changes to the user databases for the active nodes” (*e.g.*, to certain ones of those databases) enables performing synchronizing updates to reflect such changes (*e.g.*, for the remainder of those databases).

³ Microsoft doubles-down on its misplaced reliance on *In re Corkill* as allegedly rebutting the point that Microsoft’s challenge goes to inoperativeness or lack of enablement, rather than indefiniteness. Dkt. 50, 19 n.3. Microsoft is again mistaken. *See supra*, § I.B.7.

This plain reading of the claim language is consistent with, and should be understood in light of, corresponding disclosure in the specification. For example, the specification teaches “[t]o maintain synchronization, any changes to the user database of one active node are logged, and the logged changes are communicated to the other active node so that its user database is similarly updated.” ’702 patent, 3:49–53; *see also id.*, *Id.*, 4:33–38. In the cited examples, logging involves keeping track of changes to user databases for active nodes, which at least enables synchronizing databases of all active nodes in general based on those logged changes. The claim language has not been shown to be indefinite in view of its surrounding context and the intrinsic evidence.

Microsoft then raises the conclusory *attorney argument* that “one of ordinary skill would not be able to determine which ‘changes’ are to be logged.” That the claim language in question is not expressly limiting in terms of a particular species or quantity of “changes” does not render it indefinite. *See BASF Corp. v. Johnson Matthey Inc.*, 875 F.3d 1360, 1367 (Fed. Cir. 2017) (“breadth is not indefiniteness.”) (citation and internal quotations omitted).

Finally, Microsoft raises the conclusory *attorney argument* that “the phrase ‘updating the same’ introduces even more ambiguity into the claims because it lacks an antecedent basis.” Dkt. 50, 19. For claims 9 and 18, WSOU explained why a person of ordinary skill in the art would readily recognize that “updating the same” refers back to “the user databases” term. Dkt. 47, 13. WSOU then explained that this interpretation is “*further confirmed* by comparing relevant claim language recited in dependents claim 13 and 14.” *Id.* (emphasis added). Microsoft offers no rebuttal to the discussion of claims 9 and 18 and, instead, misrepresents the opening brief as “improperly importing language that is explicitly recited in claim 14 . . . into every claim.” Dkt. 50, 19. Microsoft merely offers a strawman attack; and it has failed to carry its burden.

II. U.S. Patent No. 7,366,160 (Case No. 6:20-cv-00454-ADA)

A. Disputed terms of the '160 patent which only Microsoft seeks to construe

1. “selecting two or more parameters . . .”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	selecting two or more different types of parameters of a network / measuring and/or calculating at two or more times values of the two or more different types of network parameters

Microsoft’s response brief only underscores its error in seeking to unduly restrict the phrase “selecting two or more parameters” to require, instead, “selecting two or more *different types* of parameters.” It remains undisputed that the intrinsic evidence contains no unambiguous disclaimer compelling Microsoft’s narrowing construction. Quite the contrary, the specification contains a counter example to Microsoft’s construction by providing a non-exhaustive list of example “parameters” that may be used together, followed by the statement, “parameters *of this kind* enable the reliability of the network service to be determined, for example.” ’160 patent, 2:64–3:8 (emphasis added); *see also* Dkt. 47, 16 (discussing the same). Microsoft responds that those listed parameters should be considered as “*different types*,” notwithstanding the patentee characterization that they are all of the same “kind.” Dkt. 50, 22. Microsoft’s misinterpretation of the specification reveals that it offers a construction that would only inject ambiguity and impermissibly leave it to the jury to determine the meets and bounds of Microsoft’s extraneous “different type” limitation.

While Microsoft points to the statement in the specification that “[t]he parameters *can* be weighted as a function of their importance for a given level of service,” this statement does not unambiguously require the “different type” limitation Microsoft seeks to add. Dkt. 50, 21 (quoting ’160 patent, 3:23–29) (emphasis added). On the contrary, use of the word “can” reveals that the statement is merely exemplary. That a particular example embodiment discusses the *option* of weighting parameters as a function of their importance does not foreclose the possibility the parameters so weighted are nevertheless of the *same type* (or “kind” as expressed in the ’160 patent). Moreover, parameter *weighting* is not expressed as a limitation in any of the claims.

Finally, there is no merit to Microsoft’s *attorney argument* that its narrowing construction is necessary here to preserve *novelty* of the ’160 patent, ostensibly in view of statements made in the background section of the ’160 patent. Dkt. 50, 22–23. Such consideration of *novelty* is inapposite to properly interpreting the claims. While the authority Microsoft cites is irrelevant here because it addresses the doctrine of equivalents, which is not presently at issue, even that authority recognizes (in the immediately preceding sentence no less) that “this limit on the equitable extension of literal language provides no warrant for constricting literal language when it is clearly claimed.” *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1367 (Fed. Cir. 2002).

2. “network parameter”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	measurable service level specifications from which service indicator values can be determined

In attempting to defend its rewrite of “network parameter” as “measurable service level specifications from which service indicator values can be determined,” Microsoft argues “[t]here can also be no dispute that ‘network parameters’ are [necessarily] measurable.” Dkt 50, 24. But there is a dispute. As WSOU observed, “[t]he phrase ‘measured and/or calculated parameter values’ (recited in claim 1) makes clear that the ‘values’ of a ‘network parameter’ are not necessarily measured values.” Dkt. 47, 17. In response, Microsoft states, “[t]hat parameter values can be calculated (as opposed to measured) does not negate the specification’s requirement that network parameters are measurable.” Dkt 50, 25. Here, Microsoft recognizes that the claim language itself expresses a distinction between “calculated” and “measured” values. *Id.* Notwithstanding this explicit distinction, which Microsoft acknowledges, Microsoft impermissibly attempts to commit the “cardinal sin” of importing a discussion of “measurable” from the specification as an affirmative claim limitation. *See Phillips*, 415 F.3d at 1320.

Microsoft also offers no explanation as to why the following statement in the ’160 patent should be deemed lexicographic as to the “network parameters” term: “[i]n this way a number of network parameters, also known as service level specifications (SLs), can be identified for

preferential observation in order to determine the level of service.” ’160 patent, 2:54–67. That description of an example embodiment contains none of the typical lexicographic indicators. *See* Dkt. 47, 17–18 (citing, *inter alia*, *Fisher-Rosemount*, 2015 WL 1275910, at *11). In addition, as explained further in the opening brief, the statement is expressly directed to a particular embodiment (*e.g.*, “in this way”) and refers to “a number of network parameters,” as opposed to expressing lexicography universally applicable to *all* network parameters. *Id.* WSOU also explained that incorporation of “service level specifications” into a construction for “network parameter” is *both* improper *and* unhelpful here because it would simply swap one technical term for another. *Id.* (observing the above statement from the specification “is not offered . . . as a *definition*, but rather as an alternative *description*” offered in accordance *with that embodiment*).

Evidently recognizing the weakness of its position, Microsoft relegates to a footnote a willingness to agree “network parameter” should be afforded its plain and ordinary meaning, provided there is an understanding that whatever is identified as satisfying that term “cannot also satisfy the ‘service indicator’” element. Dkt. 50, 23 n.5. Microsoft’s new and unexplained fallback position, to the extent it is not waived given its untimeliness, would risk excluding preferred embodiments of the ’160 patent. In certain embodiments, for example, a service indicator may simply be a collection of network parameters. Dkt. 49 at 20 (discussing ’160 patent, 4:11–33); *see also id.*, 2:57–58 (“A level of service indicator can be defined on the basis of measured and/or calculated data.”); 2:62–63 (“At a given time the indicator can also be defined by the values of different parameters at different times.”).

3. “determining” limitations of claim 1

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	computing [at two or more times the value of a service indicator / a trend of the indicator / a time of the service indicator crossing a defined threshold] using the [measured and/or calculated parameter values / determined indicator values / trend of the indicator]

Microsoft fails to justify its attempt to rewrite the “determining” term of claim 1 as

“calculating” instead. Microsoft alleges that “determining” (as recited in claim 1) requires “more than mere ‘measurement’ or ‘calculation’” (“measuring” and “calculating” are both also recited in claim 1). Dkt. 50, 25. It is unclear how Microsoft’s substitution of “computing” for “determining” reflects what appears to be a thinly veiled, non-infringement position advanced through claim construction. As explained in the opening brief, the patentee’s word choice of “determining” should control. Dkt. 47, 18–19. To the extent Microsoft injected a new dispute that requires a Court ruling, this term should be interpreted as at least encompassing *both* measuring *and* calculating (i.e., it is *broader* in scope, not *narrower* as Microsoft newly argues).

4. “service indicator”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	an indicator of the quality of a network service distinct from the network parameters

In purporting to defend its proposed construction for “service indicator,” Microsoft simply rehashes its position for the “network parameter” term. In both instances, WSOU impermissibly seeks to add virtually identical extraneous limitations. For the sake of brevity, WSOU defers to its briefing elsewhere on this same point. Dkt. 47, 16–18, 19–21; *supra*, § II.A.2. Given Microsoft also emphasizes its attempt to add a “quality” restriction to this term, however, it bears repeating that the ’160 patent discloses that a *service indicator* may simply be a collection of *network parameters*. *Supra*, § II.A.2. The ’160 patent never states its network parameters are restricted to *quality* only. On the contrary, “directionality of the communication” is listed among other example network parameters, according to an example embodiment. ’160 patent, 2:67–3:3.

5. “determining as a function of the trend of the indicator a time of the service indicator crossing a defined threshold”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	determining as a function of the trend of the service indicator the time remaining for the indicator crossing a defined threshold

Microsoft’s resort to mere *attorney argument* fails to establish its burden of “proving the

existence of a clear and unmistakable [prosecution history] disclaimer that would have been evident to one skilled in the art.” *Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1063–64 (Fed. Cir. 2016) (citation and internal quotations omitted). WSOU also defers to counterpoints raised in its opening brief. Dkt. 47, 21–22. The remainder of Microsoft’s argument boils down to a violation of the proscription of reading in limitations from exemplary disclosure in the specification.

B. Microsoft’s attorney argument fails to prove indefiniteness of any term

Microsoft fails to prove indefiniteness—*by clear and convincing evidence*—of any challenged claim term of the ‘160 patent. For each term, Microsoft merely by offers attorney argument, without the support of any expert testimony as to the perspective of a person of ordinary skill in the art. The conclusory challenges are deficient on their face. *See Lecat’s* 351 F. Supp. 3d at 1114); *Whirlpool*, 2016 WL 7474517, at *3.

6. “neural network determines rules of association . . .”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft has not proven the above disputed term to be indefinite by clear and convincing evidence. Rather, it relies exclusively on conclusory attorney argument in raising its deficient indefiniteness objection to only the “rules of association” clause of the disputed phrase. Dkt. 50, 32–33. This does not meet the exacting burden of clear and convincing evidence. Microsoft first complains that “[t]he phrase ‘rules of association’ appears only once in the specification, and is recited exactly as it is in claim 7.” *Id.* But “[t]he number of times [a claim term] is referenced in the specification is inapposite” to determining whether the term as used in the claim is definite. *IQASR LLC v. Wendt Corp.*, 825 F. App’x 900, 906 (Fed. Cir. 2020) (*nonprecedential*).

Microsoft then complains that the recitation of claim language in the summary of the invention allegedly provides “no description as to what such rules actually constitute.” Dkt. 50, 32. But Microsoft provides no basis to dispute that at least the exemplary description of “weighting” in the ’160 patent is encompassed by the “rules of association” claim language. *See*

Dkt. 47, 23 (citing '160 patent, 6:16–36); *see also* '160 patent, 3:20–4:10 (discussing weighting). Its only retort is to urge the false dichotomy that *either* the disclosed “‘weighting’ is the only ‘rule of association’ contemplated by the patent” *or* “the scope of this limitation remains indeterminate and therefore indefinite.” Dkt. 50, 33. Microsoft cites no authority for false the proposition that claim language which encompasses and is reflected in at least one preferred embodiment must be deemed indefinite unless it is interpreted as being strictly limited to that embodiment.⁴

Microsoft also myopically characterizes the specification as “not explain[ing] any association between elements.” *Id.*, 32. Microsoft’s objection goes to enablement or written description, not indefiniteness. Nevertheless, Microsoft at least overlooks the explanation that “[w]eighting gives dominant importance to the most sensitive parameters in determining a given network service trend.” '160 patent, 3:24–26; *see generally also* '160 patent, 3:20–4:10, 6:16–36 (further discussing weighting). The '160 patent thus describes an example of “weighting” in the context of associating “sensitive parameters” with “a given network service trend.” This disclosure closely tracks the claim language in question, which recites the “association” as being “between a service trend and service parameter values.” *Id.*, 7:12–15 (claim 7); *see also* 1:64–67.

7. “calculating a mathematical expectation of financial loss . . .”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft has not proven the above disputed term (recited in claim 10 only) to be indefinite by clear and convincing evidence. Rather, it relies exclusively on conclusory attorney argument in raising its deficient indefiniteness objection that “[t]he phrases ‘mathematical expectation’ and ‘financial loss’ represent vague concepts that are not given any meaning by the '160 patent.” Dkt. 50, 33. For “financial loss” in particular, Microsoft argues that the term “could conceivably refer to any number of different scenarios, and the method of calculating different types of financial loss could vary dramatically.” *Id.* Microsoft then cites to a *non-patent case* addressing financial loss

⁴ Microsoft’s unexplained citations to “*Nautilus*, 572 U.S. at 901” and “*IPXL*, 430 F.3d at 1383–84” do not support Microsoft’s false dichotomy. Dkt. 50, 33.

in a field other than telecommunications, evidently to emphasize that at issue there was “twenty-four different types of financial losses.” *Id.* (citation omitted). However, the Federal Circuit has instructed that “a claim to a formula containing over 5,000 possible combinations is not necessarily ambiguous if it sufficiently notifies the public of the scope of the claims.” *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1352 (Fed. Cir. 2009) (emphasis added).

Microsoft’s attorney argument also fails to prove, by clear and convincing evidence, that (1) the claim language is indefinite when viewed as a whole and (2) that “calculating” is somehow duplicative with “mathematical expectation.” The disputed phrase appears only in claim 10, which recites “[t]he method of claim 1, further comprising a step of calculating a mathematical expectation of financial loss as a function of the network service trend determined.” As explained in the opening brief, the “calculating” is plainly directed to a “mathematical expectation” (e.g., a calculatable formula). Dkt. 47, 26. The “mathematical expectation” is itself defined as being an expression of expected “*financial loss as a function of the network service trend.*” *Id.* While the claim language controls, in shorthand, the claim language may be symbolically summarized as *calculating* according to a *formula* expressing *A* as a function of *B*. That Microsoft’s counsel finds this confusing is not the proper perspective for the definiteness inquiry.

Finally, Microsoft’s conclusory attorney argument that the specification allegedly does not describe “examples of how ‘mathematical expectation of financial loss’ is to be calculated” goes to enablement or written description, not indefiniteness. Dkt. 50, 34.

8. “determining a capacity to provide a network service at a given time”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft has not proven the above disputed term (recited in claim 11 only) to be indefinite by clear and convincing evidence. Rather, Microsoft relies exclusively on conclusory attorney argument in raising its indefiniteness objection that “the ’160 patent offers competing meanings for the term ‘capacity’ with no guidance as to how to choose between them in the context of the

claim.” Dkt. 50, 34. Microsoft’s attorney argument mischaracterizes the cited passage as presenting *two* contradictory definitions. But it does not even present *one*. For ease of reference, the entire cited paragraph is reproduced below.

Trend determination can also be used to determine the service provision capacity at a given date. If the level of service is forecast at a given level at a given time, a service provision capacity at that time can be determined. A capacity to enter into service level agreements before reaching a saturation service level can therefore be defined.

’160 patent, 5:26–31. In the above example, “a service provision capacity” is determined on the basis of whether “the level of service is forecast at a given level at a given time.” This closely tracks the language of claim 11, which recites, “[t]he method of claim 1, further comprising a step of determining a capacity to provide a network service at a given time.” *Id.*, 8:10–12. The final sentence of the paragraph does not provide divergent lexicography for the “capacity” term. *Id.*, 5:29–31. On the contrary, use of the word “therefore” makes explicit reference to the preceding sentences disclosing an example of how “capacity” may be determined. The “therefore” sentence simply expresses one purpose of employing a “capacity” as disclosed is to avoid reaching a saturation service level. Accordingly, the cited dicta from *Media Rights*⁵ is inapplicable here because the cited paragraph of the ’160 patent, on its face, does not provide *clear and convincing evidence* that the claim language means “several different things and no informed and confident choice is available among the contending definitions.” 800 F.3d 1366, 1371 (quoting *Nautilus*, 572 U.S. at 900 n. 8).

III. U.S. Patent No. 8,274,902 (Case No. 6:20-cv-00465-ADA)

A. Disputed terms of the ’902 patent which only Microsoft seeks to construe

1. “network that branches, downstream of the collection point”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	refers to a tree network

⁵ *Media Rights Technologies, Inc. v. Capital One Financial Corp.*, 800 F.3d 1366 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 1173 (2016).

Microsoft only confirms in its response that its proposed construction is deficient on its face and not supported by the record evidence. To be clear, Microsoft has not expressly proposed that the term be afforded *its plain and ordinary meaning*, where “network” should be deemed as having an unrecited “tree” qualifier.⁶ Rather, Microsoft seeks to replace the entire phrase “network that branches, downstream of the collection point” with the untethered abstraction, “refers to a tree network.” Even if one were to set aside the error in newly adding a “tree” qualifier to the “network” term, notwithstanding the absence of any unambiguous requirement in the intrinsic evidence, it would not necessary follow that a *tree network* must “branch, downstream of the collection point.” Thus, it would be plainly erroneous to replace the disputed phrase with Microsoft’s untethered construction, “refers to a tree network.”

Microsoft failed to identify any statement in the ’902 patent unambiguously requiring that the claimed “network” must refer to a “tree” network only. On the contrary, Microsoft first emphasizes a statement that use the words “can” and “may” to indicate the disclosure is exemplary and hence not unambiguously required—i.e., “[o]ur method can be applied to any packetized communication network that may be represented by a tree graph.” Dkt. 50, 36 (citing ’902 patent, 2:36–37) (emphasis altered). The ’902 patent also confirms here (and elsewhere) that when the patentee intended to identify a network as having a “tree” qualifier, it said so. It is significant, therefore, that the claim language in question recites no such qualifier.

Notwithstanding the explicitly *non-limiting* nature of the sentence quoted above, Microsoft offers the untenable argument that because a sentence a few lines down states “applications of our method are not limited to GPRS networks or to wireless networks” (2:40–41, emphasis added), it is appropriate to interpret the prior phrase “may be represented by a tree graph” as somehow unambiguously requiring a tree network as a claim limitation. Dkt. 50, 36. That a patentee uses

⁶ Because Microsoft seeks to define the entire disputed phrase through use of a substituting construction, and because it has flatly refused to accept that the term should be afforded its plain and ordinary meaning (as WSOU proposes), the authority Microsoft cites as applying the plain and ordinary meaning with a “refer to” clarification is inapposite here. Dkt. 50, 37 (citations omitted).

“not limited to” in one instance to explicitly confirm a concept is not limiting does not preclude the patentee from expressing another concept is not limiting through use of the words “can” and “may.” *See, e.g., Cadence Pharm. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1369 (Fed. Cir. 2015) (“The statement in the specification that the concentration of the buffer ‘may be’ between 0.1 and 10 mg/ml is not limiting, because even if ‘all of the embodiments discussed in the patent’ included a specific limitation, it would not be proper to import from the patent’s written description limitations that are not found in the claims themselves.”) (citation and internal quotations omitted); *Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 412 F.3d 1284, 1287 (Fed. Cir. 2005) (refusing to import as a claim limitation a description of a preferred embodiment, which also happened to use the word “may”). The holding from *Cadence*—*which is simply a restatement of well-established law*—also defeats Microsoft’s argument that its importation from the specification is justified here ostensibly because “various embodiments of the claimed method . . . [are] all applied on a tree network.” Dkt. 50, 36; *cf. Cadence Pharm.*, 780 F.3d at 1369.

Microsoft also errs in suggesting the extrinsic evidence identified—a technical dictionary published by Microsoft—supports its construction. The dictionary entry for “branch” included two distinct definitions, only one of which made specific mention of a “directory tree.” *See* Dkt. 47, 28 (discussing Blanton, A., and Haynes, S., Microsoft Computer Dictionary Fifth Edition, Microsoft Press, 2002, p. 22, filed as Exhibit A to Dkt. 47). Microsoft’s own broader definition for “branch” was “[a]ny connection between two items such as . . . nodes in a network.” *Id.* In its response, Microsoft argues the secondary definition for “branch” is “inapposite” because does not describe “branching” of the network. Dkt. 50, 37. Setting aside that the claim language recites “branch,” not “branching,” it is nonsensical to argue that defining “**branch**” as **a connection between nodes in a network** somehow does not describe “branching” of the network. *Id.* It is also telling that Microsoft has no problem with the first dictionary definition, even though it defines “branch” as “[a] node . . .” in the singular. Dkt. 47, Ex. A at 22.

2. “estimating a packet loss rate” and “an estimate of a packet loss rate”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning	calculating an approximate packet loss rate / a calculation of approximate packet loss rate

Regarding the “estimating . . .” and “estimate . . .” terms, Microsoft confirms in its response that it merely seeks to substitute its preferred language for what is recited. Microsoft flips the parties’ respective positions in suggesting WSOU has a *narrower* interpretation because it prefers the patentee’s word choice over the substitution proposed by Microsoft. By seeking to rewrite the recited “estimate” as “a calculation of approximate,” Microsoft introduces extraneous limitations that connote a *relational proximity* to an actual or theoretical value. To borrow from Microsoft’s own reasoning, “if the patent drafter wanted to claim [a relational proximity to an actual or theoretical value], the patent drafter could have recited, for example, [approximate], a term that is used elsewhere in the specification but not found in the claims.” Dkt. 50, 38. Microsoft falls on its own sword; and it has failed to persuasively defend its departure from the claim language.

3. “packet loss rate”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
the fraction of packets that are lost over a suitable time interval	the fraction of packets that are lost over a suitable time-averaging interval

Both parties recognize the specification contains lexicography for the “packet loss rate” term—i.e., “the fraction of packets that are lost over a suitable time-averaging interval[.]” ’902 patent, 3:46–47. The sole dispute is whether (1) the Court should slavishly adopt the entirety of that lexicographic statement verbatim, while leaving it to the jury to decide the meaning and scope of “time-averaging” in this context (as Microsoft proposes); or, instead, (2) the Court should either drop or separately construe the unrecited “time-averaging” couplet of that statement (as WSOU proposes). Microsoft misrepresents to the Court (twice) that WSOU has conceded “time-averaging” is “ambiguous” in this context. Dkt. 50, 39. Just because *the written description* contains a word or phrase that is unnecessary, or that may benefit from Court interpretation if

included in a construction, does not render it ambiguous. Moreover, in arguing the lexicography should be adopted verbatim, Microsoft has not raised, and does not even purport to have preserved the right to raise, an indefiniteness challenge as to “time-averaging” in this context.

If the Court is inclined to consider whether construction of “a suitable *time-averaging* interval” is itself warranted here, an overview of certain relevant disclosure may prove useful. The same passage of the ’902 patent discusses the concept of “a time interval δ .” ’902 patent, 3:30–46. Use of the symbol “ δ ” is then repeated elsewhere in the written description in addressing the concept of a time interval. That passage further states that “[t]he value of δ may be specified by the operator, or it may be determined adaptively.” *Id.*, 3:36–38. If construed at all, therefore, the statement “a suitable time-averaging interval” should be interpreted as encompassing both a fixed interval and one that is determined adaptively.

B. Sole phrase of the ’902 patent which Microsoft seeks to challenge as indefinite

4. “wherein the collected data relate to packet losses on the portion of a GPRS core network extending from the collection point to a plurality of [base / mobile] stations”

WSOU’s Proposed Construction	Defendant’s Proposed Construction
Plain and ordinary meaning; not indefinite	Indefinite

Microsoft’s one-paragraph argument fails to meet Microsoft’s burden to prove indefiniteness *by clear and convincing evidence* of the two challenged “wherein . . .” clauses (recited only in dependent claims 4 and 5 of the ’902 patent). Dkt. 50, 40. All Microsoft offers is mere conclusory attorney argument, without the support of any expert testimony as to the perspective of a person of ordinary skill in the art. Microsoft’s conclusory attorney argument is deficient on its face. *See Lecat’s* 351 F. Supp. 3d at 1114); *Whirlpool*, 2016 WL 7474517, at *3.

Microsoft’s attorney argument is based on a flawed and unsupported premise—i.e., that “[c]laims 4 and 5 recite ‘base stations’ and ‘mobile stations,’ respectively, that are a ‘portion of a GPRS core network.’” Microsoft relies on a flawed interpretation that would turn the claim language on its head. As pointed out in the opening brief, the claim language at issue plainly

recites “*the* portion of a GPRS core network” as a distinct claim element “extending from the collection point *to* a plurality of [base stations / mobile stations].” Dkt. 47, 31–32. This explicit differentiation, made plain with use of the words “the” and “to,” confirm *neither* the base station (claim 4) *nor* the mobile station (claim 5) is properly considered part of what is recited as “the portion of a GPRS core network.” This kills the entire premise of Microsoft’s invalidity theory.

Microsoft’s invalidity theory is also legally flawed in that it goes to *inoperability*, which is “irrelevant to definiteness under § 112, ¶ 2” and which says “nothing about a skilled artisan’s understanding to the bounds of the claimed invention.” Dkt. 47, 30 (quoting *Miles Laboratories, Inc. v. Shandon Inc.*, 997 F.2d 870, 875, (Fed. Cir. 1993)). Microsoft’s response brief ignores this independently-fatal deficiency altogether.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record, on February 11, 2021.

/s/ James L. Etheridge
James L. Etheridge